

REMARKS

The Examiner is requested to approve the accompanying replacement drawings. The changes to the drawings has been amended so that the "device info" is designated with reference numeral 6 for the sake of consistency within Figure 1.

Pending Claims

Claims 3, 4 and 5 have been cancelled, without prejudice. Independent claims 1 and 6 of this application have been amended to more clearly distinguish their subject matter over the prior art cited, as requested by the Examiner. New claims 7, 8 and 9 have been added, of which claims 7 and 9 are independent. New independent claim 7 is based on now cancelled claim 3 and new independent claim 9 is based on now cancelled claim 4. Additionally, new claims 7 and 9 also include subject matter further distinguishing them from the prior art in a similar manner to claim 1, discussed in more detail below. No new matter is added by any of these amendments. Reconsideration is respectfully requested in view of the amendments and remarks herein.

Claim Rejections

The Office Action has rejected claims 1 to 6 under 35 U.S.C. 102(b) as being anticipated by Boucher et al (U.S. Patent No. 6,226,680), hereinafter referred to as "Boucher".

This objection is respectfully traversed.

35 U.S.C. § 102(b) states that a person shall be entitled to a patent unless -

the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application in the United States.

Boucher's invention was patented on 1 May 2001, this also being the date of publication of Boucher's invention. Inasmuch as the present application was filed in the United States on 14 May 2001 and claims priority to a U.K. application filed 15 May 2000, the Boucher reference does not meet the requirements of § 102(b)

Boucher does, however, appear to be a reference citable under U.S.C. 102(e) (2). Assuming this was the Examiner's intention, this response proceeds on that basis.

The claims have been amended to distinguish their subject matter more clearly from the prior art cited by the Examiner. The independent claims now specify that the data packet is interpretable by a first processing node and the data packet is expanded to include a further layer containing routing information relating to a next stage in the processing of the packet, which is performed at a second processing node, the second processing node leaving the inner layers of the packet intact and undisturbed. Support for this amendment made to the independent claims can be found, for example, on pages 6 and 7 of the application as originally filed.

As discussed in the application as originally filed, by constructing a data packet that is distributed over a network including a plurality of processing nodes, which packet includes a client request layer and also holds the response data generated by the processing nodes, there is no need to construct and manage a complex database of various information requests submitted by clients. The data packets are essentially self-contained and can be passed from processing node to processing node. When the data packet is returned, the response data can be obtained, together with relevant details from the client request layer, and this allows the response to be distributed to the client. The first processing node interprets the data packet and adds a further layer containing routing information relating to the next stage in the processing of the packet to be performed at a second processing node. The second processing node performs processing of the layer containing routing information whilst leaving inner layers of the packet intact and undisturbed. The packet may be passed to third and subsequent processing nodes, as necessary. Each processing node will add a layer containing routing information relating to the next stage in the processing of the packet. The inner layers of the packet are left intact and undisturbed. This maintains the integrity of the inner layers and also preserves the anonymity of the client. However, when the data packet is

returned after processing, data relating to the client in the client request layer can be interpreted, and this allows the response data generated by the processing nodes to be delivered to the client.

Such an arrangement is not disclosed by Boucher or any of the other prior art available.

In column 2 at lines 35 to 54, Boucher describes a prior art ("background") arrangement for preparing data for transmission from a first host/node to a second host/node. The hosts have a layered software architecture. The layers help to segregate information into manageable segments, the general function of each layer being, for example, based on the International standard called Open Systems Interconnection (OSI). Each lower layer performs a service for the layer immediately above it to help with processing the communicated data.

As Boucher describes, when preparing data for transmission from the first host to the second host, some control data is added at each layer of the first host regarding the protocol of that layer, the control data being indistinguishable from the original (payload) data for all lower layers of that host. Thus an application layer attaches an application header to the payload data and sends the combined data to the presentation layer of the sending host, which receives the combined data, operates on it and adds a presentation header to the data, resulting in another combined data packet. Various further layers each add their own additional header to the data packet.

In column 2 from line 55 it is described how the second (receiving) host receives the data packet. The receiving host removes the headers and processes the associated data in order from the lowest (physical) to the highest (application) layer before transmission to a destination of the receiving host.

The headers disclosed by Boucher are not equivalent to and do not suggest the data packet layers of the present invention. In the present invention a data packet includes a plurality of layers. When this data packet is received by a first processing node it is expanded to include a further layer containing routing information relating to a next stage in the

processing of the packet, which is to be performed at a second processing node, whilst leaving the original, inner layers of the packet intact and undisturbed.

In complete contrast, Boucher teaches removal of each header by a receiving node/host and processing of the data associated therewith. The inner layers/headers of the data packet of Boucher are not left intact and undisturbed. Boucher teaches completely the opposite arrangement.

The teaching of Boucher discussed above relating to headers concerns "background" information considered by Boucher when making his invention. Boucher's invention concerns an arrangement for determining whether it is more efficient to process a received data packet by using a sequential stack of protocol layers or to avoid processing by the protocol layers. A host receives a data packet including data and a plurality of headers corresponding to the sequential stack of protocol layers. The headers are processed sequentially as a group and a summary of the group of headers is created. In dependence upon this summary a decision is made whether or not to process the data packet by the protocol layers. The data may be transferred without the headers to its destination in accordance with the summary of the group of headers, without processing the headers by the protocol layers.


Therefore, Boucher's invention is even further removed from the present invention than the "background" that Boucher describes.

Conclusion

In summary, Boucher does not disclose or appreciate the claimed invention. Accordingly, it does not anticipate or render obvious those claims. In view of the amendments made to the claims and the foregoing remarks, the application is submitted to be in good and proper form for allowance, and the Examiner is respectfully requested to pass the application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the present application, the Examiner is invited to telephone the undersigned attorney.

In re Appln. of Lincoln et al.
Application No. 09/855,142

Respectfully submitted,

A handwritten signature in cursive script, reading "Pamela J. Ruschau", is written over a horizontal line.

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Date: October 26, 2004

Amendment or ROA - Regular (Revised 7/29/03)

AMENDMENTS TO DRAWINGS

A replacement drawing sheet 1/2 is filed herewith for the Examiner's consideration. Figure 1 has been amended so that the "device info" is designated with reference numeral 6 for the sake of consistency within Figure 1.